CLAIMS

1. A method for performing an online upgrade to a Java application, the method comprising:

executing an application having an original service module and an original control module, wherein the original control module includes application-specific polices for the application;

generating an upgraded control module; and

creating an upgraded service module using the upgraded control module, whereby the original control module and the original service module are upgraded.

2. A method as recited in claim 1, wherein the upgraded control module is generated using upgraded class files for the upgraded control module loaded from a system repository.

3. A method as recited in claim 1, wherein the upgraded service module is generated using upgraded class files for the upgraded service module loaded from a system repository.

4. A method as recited in claim 3, further comprising the operation of disabling requests to the original service module.

5. A method as recited in claim 4, further comprising the operation of enabling requests to the upgraded service module.

6. A method as recited in claim 1, further comprising the operation of upgrading a child application using the upgraded control module.

7. A method as recited in claim 6, further comprising the operation of passing the application-specific polices to a control module of the child application.

8. A Java platform capable of performing online software upgrades, the Java platform comprising:

an application having an original service module and an original control module, wherein the original control module includes application-specific polices for the application; and

a repository having upgraded class files for the original control module and upgraded class files the original service module,

wherein the original control module is upgraded by generating an upgraded control module using the upgraded class files for the original control module loaded from the repository, and wherein the original service module is upgraded by creating an upgraded service module using the upgraded control module.

9. A Java platform as recited in claim 8, wherein the upgraded service module is generated using upgraded class files for the original service module loaded from the repository.

10. A Java platform as recited in claim 9, wherein requests to the original service module are disabled during upgrade of the original service module.

11. A Java platform as recited in claim 10, wherein requests to the upgraded service module are enabled during upgrade of the original service module.

12. A Java platform as recited in claim 8, wherein the upgraded control module is capable of initiating the upgrade of a child application.

13. A Java platform as recited in claim 12, wherein the application-specific polices are passed to a control module of the child application during the upgrade of a child application.

14. A method for upgrading a Java platform, comprising the operations of:

upgrading service subsystems, wherein the service subsystems include a repository;

upgrading a root Java server process;

upgrading a root system application; and

recursively upgrading user applications currently executing of the Java platform.

15. A method as recited in claim 14, wherein upgrading the service subsystems comprises the operations of:

creating an upgraded root Java server backup process using a bootstrap program; and

stopping execution of an original root Java server backup process using the bootstrap program.

16. A method as recited in claim 15, wherein upgrading the root Java server process comprises the operations of:

generating an upgraded root Java server using a first runtime executive;

loading upgraded class files for the upgraded root Java server from the repository;

transferring the runtime executive to the upgraded root Java server; and

allocating modules allocated to the original root Java server to the upgraded root Java server.

17. A method as recited in claim 16, wherein transferring the runtime executive to the upgraded root Java server comprising the operations of:

creating a second runtime executive using the upgraded root Java server;

disabling requests to the first runtime executive;

transferring a state of the first runtime executive to the second runtime executive; and

enabling requests to the second runtime executive.

18. A method as recited in claim 17, wherein upgrading the root system application comprises the operations of:

creating an upgraded runtime executive using the upgraded root Java server; and

upgrading service modules of the root system application using the upgraded runtime executive.

19. A method as recited in claim 18, further comprising the operation of upgrading a child system application.

20. A method as recited in claim 19, further comprising the operation of upgrading a top user application.

21. A method as recited in claim 20, further comprising the operation of recursively upgrading remaining user applications currently executing on the Java platform.